PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

					_
OIP ED MENTETAL	Application Number	er	10/686,916	1	
O' TRANSMITTAL	Confirmation Num	ber.	7475		
DEC 2.7 2005		Filing Date		10/16/2003	
/3/	First Named Inven	tor	Joseph Michael Christie		
or all correspondence after	initial filing)	Art Unit		2661	
To all solves and a second		Examiner Name			
Total Number of Pages in This Submiss	ion 209	Attorney Docket N	umber	1090j	
	ENCLO	SURES (check all tha	t apply)		
Fee Transmittal Form	☐ Drawing(s	s)		After Allowance Communication	:o TC
Fee Attached	Licensing	related Papers	•	Appeal Communication to Board	
_	Petition	·		of Appeals and Interferences Appeal Communication to TC	
Amendment / Reply				(Appeal Notice, Brief, Reply Brief)	
After Final		Convert to a al Application		Proprietary Information	
Affidavits/declaration(s)		Attorney, Revocation f Correspondence Add	ress	Status Letter	
Extension of Time Request			Other Enclosure(s) (please identify below):		
	Request f	Request for Refund		14 foreign patents;	
Express Abandonment Request	CD, Numb	CD, Number of CD(s)		3 non patent literature documents; ar return receipt postcard	ia
Information Disclosure Statement	. 🔲 Lan	andscape Table on CD			
Certified Copy of Priority Document(s) Reply to Missing Parts/			Commissi	are due in this matter. However, if it in the interior is authorized to debit Deposit	is
Incomplete Application Reply to Missing Parts under 37 CFR1.52 or 1.53	Statement is	e that each item of inf being filed before the 37 CFR 1.97(b).	ormation mailing o	contained in this Information Disclo date of a first Office Action on the m	sure erits
SIGI	NATURE OF A	APPLICANT, ATTOI	RNEY, OI	R AGENT	
Firm	Setter Ollila LLC	· · · · · · · · · · · · · · · · · · ·			
Signature					
Printed Name Stephen S. Rock		he			
Date	-05	Reg. No.	52,176		
	CERTIFICA	TE OF TRANSMISS	ION/MAI	LING	
I hereby certify that this correspondent class mail in an envelope addressed to 1450 on the date shown below.	ce is being der o: Mail Stop Am	posited with the United endment, Commission	States Poler for Pate	ostal Service with sufficient postage a ents, P.O. Box 1450, Alexandria, VA 2	is first !2313-
Signature	uie /	ameron			
Typed or printed name Jamie Ca		· · · · · · · · · · · · · · · · ·		Date (2-10-05	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

OF COMMERCE

Substitute for form 1449A/F/TO DEC 2 7 7005 INFORMATION DISCLOS

10/686,916 Application Number Filing Date 10/16/2003 Joseph Michael Christie First Named Inventor 2661 Art Unit Examiner Name

(Use as many sheets as necessary)

1090j Attorney Docket Number Sheet

			U.S. PATENT	DOCUMENTS	
Examiner	Cite	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant
Initials *	No. ¹	Number - Kind Code ² (if known)	MM-DD-TTTT		Figures Appear
	1	US- 4,720,850	01/19/1988	Oberlander et al.	
	2	US- 4,730,312	03/08/1988	Johnson et al.	•
	3	US- 4,736,364	04/05/1988	Basso et al.	·
	4	US- 4,748,658	05/31/1988	Gopal et al.	
	5	US- 4,757,526	07/12/1988	Foster et al.	
	6	US- 4,763,317	08/09/1988	Lehman et al.	
	7	US- 4,853,955	08/01/1989	Thorn et al.	
	8	US- 5,003,584	03/26/1991	Benyacar et al.	
	9	US- 5,048,081	09/10/1991	Gavaras et al.	
	10	US- 5,051,983	09/24/1991	Kammerl	
	11	US- 5,089,954	02/18/1992	Rago	
	12	US- 5,115,427	05/19/1992	Johnson, Jr. et al.	
	13	US- 5,185,743	02/09/1993	Murayama et al.	
	14	US- 5,204,857	04/20/1993	Obara	
	15	US- 5,251,255	10/05/1993	Epley	
	16	US- 5,258,979	11/02/1993	Oomuro et al.	
	17	US- 5,271,010	12/14/1993	Miyake et al.	
	18	US- 5,274,635	12/28/1993	Rahman et al.	
	19	US- 5,282,244	01/25/1994	Fuller et al.	
	20	US- 5,289,472	02/22/1994	Cho	
	21	US- 5,291,492	03/01/1994	Andrews et al.	
	22	US- 5,327,421	07/05/1994	Hiller et al.	
	23	US- 5,339,318	08/16/1994	Tanaka et al.	
	24	US- 5,345,443	09/06/1994	D'Ambrogio et al.	
	25	US- 5,345,445	09/06/1994	Hiller et al.	
	26	US- 5,345,446	09/06/1994	Hiller et al.	
	27	US- 5,363,433	11/08/1994	Isono	
	28	US- 5,375,124	12/20/1994	D'Ambrogio et al.	
	29	US- 5,377,186	12/27/1994	Wegner et al.	-
	30	US- 5,392,402	02/21/1995	Robrock, II	
	31	US- 5,420,858	05/30/1995	Marshall et al.	
	32	US- 5,422,882	06/06/1995	Hiller et al.	
			06/13/1995	Orriss	
	33	US- 5,425,090			
	34	US- 5,428,609	06/27/1995	Eng et al.	
	35	US- 5,434,852	07/18/1995	La Porta et al.	
	36	US- 5,434,981	07/18/1995	Lenihan et al.	
	37	US- 5,438,527	08/01/1995	Feldbaumer et al.	
	38	US- 5,440,626	08/08/1995	Boyle et al.	
	39	US- 5,444,713	08/22/1995	Backaus et al.	
	40	US- 5,452,297	09/19/1995	Hiller et al.	
	41	US- 5,452,350	09/19/1995	Reynolds et al.	
-	42	US- 5,457,684	10/10/1995	Bharucha et al.	
-	43	US- 5,459,722	10/17/1995	Sherif	
	44	US- 5,469,501	11/21/1995	Otsuka	
	45	US- 5,473,677	12/05/1995	D'Amato et al.	
		——————————————————————————————————————	12/05/1995	La Porta et al.	
	46	US- 5,473,679	1203/1333	Ca , Orta et al.	

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO Complete if Known Application Number 10/686,916 INFORMATION DISCLOSURE Filing Date 10/16/2003 STATEMENT BY APPLICANT Joseph Michael Christie First Named Inventor Art Unit (Use as many sheets as necessary) Examiner Name 1090j Attorney Docket Number Sheet

Document Number Name of Patentee or Applicant of Pages Columns Lines Where Paleuret									
Examiner Initials *	Cite No. ¹	Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear				
	48	US- 5,495,484	02/27/1996	Self et al.					
	49	US- 5,509,010	04/16/1996	La Porta et al.					
	50	US- 5,519,707	05/21/1996	Subramanian et al.					
	51	US- 5,519,690	05/21/1996	Suzuka et al.					
	52	US- 5,530,724	06/25/1996	Abrams et al.					
	53	US- 5,537,461	07/16/1996	Bridges et al.					
	54	US- 5,541,917	07/30/1996	Farris	•				
	55	US- 5,550,834	08/27/1996	D'Ambrogio et al.					
	-56	US- 5,550,914	08/27/1996	Clarke et al.					
	57	US- 5,563,939	10/08/1996	La Porta et al.	,				
	58	US- 5,566,173	10/15/1996	Steinbrecher					
	59	US- 5,568,475	10/22/1996	Doshi et al.					
	60	US- 5,577,037	11/19/1996	Takatori et al.					
	61	US- 5,579,311	1.1/26/1996	Chopping et al.					
	62	US- 5,592,477	01/07/1997	Farris et al.					
	63	US- 5,600,643	02/04/1997	Robrock, II					
	64	US- 5,619,561	04/08/1997	Reese					
	65	US- 5,623,491	04/22/1997	Skoog					
	66	US- 5,635,980	06/03/1997	Lin et al.					
	67	US- 5,640,446	06/17/1997	Everett et al.					
	68	US- 5,673,262	09/30/1997	Shimizu					
	69	US- 5,689,550	11/18/1997	Garson et al.					
	70	US- 5,706,286	01/06/1998	Reiman et al.					
	71	US- 5,765,108	06/09/1998	Martin et al.					
	72	US- 5,784,371	07/21/1998	lwai					
	73	US- 5,793,765	08/11/1998	Boer et al.	4.				
	74	US- 5,825,780	10/20/1998	Christie					
			02/16/1999	Kienberger					
	75	US- 5,872,785		Christie					
	76	US- 5,991,301	11/23/1999						
	77	US- 5,999,594	12/07/1999	Mizoguchi et al.					
-	78	US- 6,175,574	01/16/2001	Lewis					
	79	US- 6,181,703	01/30/2001	Christie et al.					
	80	US- 6,324,179	11/27/2001	Doshi et al.					
					•				
	· ·								
		† · · · · · · · · · · · · · · · · · · ·	-						
		 							
		 		 					
				 	-				
				 					
				 					
				<u> </u>					
				1					

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known			
				Application Number	10/686,916		
INF	ORMATIC	ON DISC	CLOSURE	Filing Date	10/16/2003		
STA	TEMENT	BY AF	PLICANT	First Named Inventor	Joseph Michael Christie		
				Art Unit	2661		
	(Use as man	y sheets as n	ecessary)	Examiner Name			
Sheet	3	of	4	Attorney Docket Number	1090j		

		FOREIGN PA	TENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ⁵ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁸
	81	EP0439098	07/31/1991	Tanabe et al.		
	82	WO9214321	08/20/1992	Takase et al.		·
	83	JP2215247	08/28/1990	Tsuboi et al.		
	84	JP1300738	12/05/1989	Suzuki et al.		
	85	JP1013534	01/18/1989	Kamio et al.		
	86	JP4180324	06/26/1992	Atsushi et al.		
	87	JP4196635	07/16/1992	Osahide		
	88	JP5327751	12/10/1993	Hyodo et al.		
	89	JP6006320	01/14/1994	Baba et al.		
	90	JP6209365	07/26/1994	Toshiro et al.		
	91	JP7250099	09/26/1995	Koshiro et al.		
	92	JP8149137	06/07/1996	Nakajima et al.		
 	93	HU71152	11/28/1995	Hiller et al.		
	94	EP0935856	08/18/1999	Christie et al.	<u> </u>	
		2. 000000				
						
				· · · · · · · · · · · · · · · · · · ·		
		,			<u>'</u>	
			-			
						
				-		
					 	
·						
			-			
		· · · · · · · · · · · · · · · · · · ·				
					<u> </u>	

Examiner Signature	Date Considered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \(^1\) Applicant's unique citation designation number (optional). \(^2\) See Kinds Codes of USPTO Patent Documents at \(\frac{\text{www.uspto.gov}}{\text{uspto.gov}}\) or MPEP 901.04. \(^3\) Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \(^4\) For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \(^3\) Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. \(^6\) Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b(08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO					Complete if Known			
					Application Number	10/686,916		
INFORMATION DISCLOSURE					Filing Date	10/16/2003		
	STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Joseph Michael Christie		
				•	Art Unit	2661		
		(Use as many sh	eets as	necessary)	Examiner Name			
$\overline{}$	Sheet	4	of	4	Attorney Docket Number	1090j		

		NON PATENT LITERATURE DOCUMENTS	,
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	95	KURIBAYASHI, SHIN-ICHI; Advanced Signaling Protocol for Broadband ISDN Services; Electronics and Communications in Japan; Part 1, Volume 78, Number 1, Pages 1-12.	
	96	Hungarian office action dated June 23, 1999 citing Hungarian patent number HU170127 for Hungarian Application No. P9900232; 2 pages.	
	97	Russian office action dated April 22, 2002 citing Russian patent numbers RU2013011 and RU2007880 for Russian Application No. 99112956; 6 pages.	
•			
•			

Examiner	Date	
Signature	 Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.